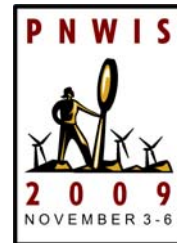


The Environmental Challenge International

...a student team competition



PROTOCOL

General Description:

The Environmental Challenge (EC) Program is a student team competition to prepare and present an optimal solution to a complex “true-to-life” environmental problem. The problem presented will be of current value, representative of the location of the event, and require multi-disciplinary approaches for success. The Challenge seeks not only technical and scientific analyses, but solutions that are presented in conjunction with the development of appropriate regulatory approaches and resolution of political and community issues.

The goals of the EC are to

- Involve students in the Pacific Northwest International Section (PNWIS) Annual Conference of the Air & Waste Management Association
- Provide experience in solving complex environmental situations in a fun and supportive atmosphere
- Provide students an opportunity to display their talents
- Be a premier networking event for students to connect with internship and job opportunities

The EC is designed to promote formation of student teams with the broadest feasible range of environmental disciplines including engineering, planning, policy, economics, and various other sciences. The problem will be relevant to the conference location and current events. Teams must research the problem background, as well as the technical, social, economic, and political aspects of the situation. Teams must stay apprised of ongoing events related to the problem adjusting their solutions appropriately leading up to and during the conference.

Although winning solutions to the proposed problem must have sound engineering and technical bases, the solution generally does not require a full engineering design presentation. Similarly, all problems pose economic and political issues that must be addressed. Solutions are expected to provide reasonable resolutions applying basic engineering and scientific knowledge to research scenarios and critical questions.

Student teams should start to form following posting of the problem (September 1, 2009). Just as corporations and other organizations pull together teams from their staff to most effectively address any given project, so too should each student team by identifying and recruiting representatives from appropriate disciplines as needed to address the problem holistically. Schools may wish to consider combining students to make balanced teams and are encouraged to do so. Student teams must register for the EC by emailing Steve Rybolt (Rybolt.S@portseattle.org). Please note: Each team member must register for PNWIS Annual Conference in addition to the team registering for the EC.

Once teams reach the conference, preparation of broad background knowledge of the challenge topic will be the key to a successful competition. Role players in the EC problem will be identified and available for students to approach with questions and to consult for opinions. The role players are conference attendees and professionals in the environmental field. The conference is a premier networking opportunity and the EC problem provides an excellent topic for discussion and networking. The role players provide a key interaction for the EC participants as direct feedback on their solutions, asking questions to prepare the students for the project presentations, and enhancing the student networking experience at the PNWIS Annual Conference. The role players also are critically involved in a “tweak” (added complication to the problem) that tests the students’ knowledge of the challenge topic.

EC Competition Preparation

Student teams should start to form immediately following posting of the problem (September 1, 2009) identifying and recruiting representatives from appropriate disciplines as needed to address the problem holistically. Just as corporations and other organizations pull together teams from their staff to most effectively address any given project, so too should each student team. Schools may wish to consider combining students to make up balanced teams and are encouraged to do so.

Student teams may not contain more than 5 members and are generally comprised of 3 to 5 individuals.

Eligibility:

The EC competition is open to all students who are registered for the PNWIS Annual Conference and have not been out of school for more than one full year. The competition will be a combined event for graduate and undergraduate students competing equally.

Note: Students must register for AND attend the conference to participate in the competition.

Teams must register prior to the PNWIS Annual Conference *and* one member from each team must contact Steve Rybolt (Rybolt.S@portseattle.org). Each team member participating must register for and attend the annual conference during which the competition is judged.

Expectations for proposed problem solutions:

Solid technical analysis, logic train, process, conceptualizations, and creativity are all critically important to the proposal and presentation composition. Clear and concise presentation of your thoughts in a public forum is paramount to success. Your team will need to make reasonable assumptions as part of the solution. The assumptions must pass the "straight-face" test. This is (almost) the real world! The proposal must identify each team member by name and the role they will have in the presentation, (e.g., "Sally Smith" is the lead project engineer and will address waste issues, "Jim Jones" is the city planner; You include the disciplines that you think you need).

Written Proposal:

Each team must submit five (5) written proposals upon arriving at the PNWIS Annual Conference – November 4, 2009 - addressing the problem: The written proposal should provide an outline of the approach that your team is going to take, the issues that you will be discussing, include the names and roles of each team member, and *shall not* exceed 3 pages.

Written proposals will be distributed to the EC judges on November 4, 2009 with a scoring form.

The Tweak:

No matter how much you do and know, in real life unexpected events and expectations can and do occur in real life. To this end, you should expect (when you pick up your EC registration packet at the Student Welcome Booth) some late breaking information that might alter your approach and/or require your problem to the solution to evolve. The problem and the tweak will require that you find and talk to "experts" and attend technical sessions, during the conference, for answers and important information.

An orientation meeting for the EC participants will be held on Tuesday November 4, 2009 (exact time will be identified in the conference program).

Role players in the problem will be identified in the EC packet picked up at the Registration Booth.

Role Players:

During the conference you will be required to speak with role players involved with the problem. These role players will be project proponent(s), regulators, politicians, activists and other expected or unexpected individuals critical to creating a solution to the problem. Role players will offer insight and clarify any additional questions each team may have in relation to the problem. Please use professionalism during all business meetings, technical and plenary sessions, have fun while remembering your environment. While these role players are critical, so are the technical sessions and exhibitors that are related to the problem.

Competition Finale: The Presentation*

For the final presentation, teams must demonstrate their understanding of the issues in the written proposal and poster presentations and address the tweak. Sustainable approaches for these and other site issues are of great interest to the owners.

The winning team presentation will be strong in approach, logic, clarity, application, and creativity.

Each of the teams will present their problem solution on Friday morning November 6, 2009 from 8:00 a.m. to 12:00 p.m. during the technical session program that day. Presentation order will be chosen randomly. A computer and projector will be provided for the presentation (w/Microsoft PowerPoint). Please bring your presentation on a data stick or disk to be transferred to the computer. Plan for a 15-minute presentation followed by 5 minutes of questions and answers.

Winners will be announced at the Honors and Awards Luncheon on Friday, November 6, 2009.

EC Timeline:

DATE	TIME	EVENT
September 1, 2009		EC Problem Posted
November 4, 2009		EC Proposal Due at Registration Desk
November 4 - 6		PNWIS Annual Conference
	TBA	EC Orientation
November 4 – 5		EC Role Player Interviews
November 6, 2009	8:00 a.m. – 12:00 p.m. TBA	EC Presentations Honors and Awards Luncheon

Questions should be directed to:

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